

NORAD CHRONOLOGY

16 Feb 51

The Joint Chiefs of Staff (JCS) approved a US-Canadian Permanent Joint Board on Defense (PJBD) recommendation (51/1) for an extension of the Permanent Radar Net. It called for the extension and consolidation of the present control and warning system of Canada and the US into one operational system to meet air defense needs of both countries.

10 Mar 51

US Army Antiaircraft Command assumed command for the first time of all antiaircraft forces assigned to air defense.

14 Jul 52

Start of US Ground Observer Corps Operation Skywatch, during which civilian observer posts were manned 24 hours per day.

24 Feb 54

President Eisenhower approved the National Security Council's recommendation for construction of a Distant Early Warning (DEW) Line.

1 Sep 54

Continental Air Defense Command (CONAD) established.

30 Jul 55

First west coast US Navy picket ship station manned on a full-time basis.

21 Mar 57

The US Army Antiaircraft Command was redesignated Army Air Defense Command (ARADCOM).

15 Jul 57

The main DEW Line from Cape Dyer, Baffin Island to Cape Lisburne, AK declared technically ready.

1 Aug 57

East and West portions of the DEW Line placed under operational control of United States Air Force (USAF) Air Defense Command and Alaskan Air Command, respectively.

1 Aug 57

The Canadian Minister of National Defence and the US Secretary of Defense jointly announced the agreement between their governments to establish integrated operational control of the air defense forces of the two countries.

Jan 58

Mid-Canada [radar] Line declared fully operational.

Jan 58

US Ground Observer Corps reduced from 24-hour to ready-reserve status.

27 Aug 57

Soviet Union announced successful launch of a multi-stage ballistic missile.

Aug 57

DEW Line was dedicated by US Air Force.

12 Sep 57

North American Air Defense Command (NORAD) was established with headquarters at Ent Air Force Base in Colorado Springs, CO. Commander-in-Chief, NORAD assigned operational control over Canadian and US air defense forces. CINCNORAD dual-hatted as Commander-in-Chief, CONAD [US joint command].

4 Oct 57

Sputnik I, the first man-made satellite, was launched by the USSR.

Nov 57

The first Baker-Nunn precision optical satellite tracking camera installed at White Sands, NM.

14 Jan 58

United States announced decision to establish a Ballistic Missile Early Warning System (BMEWS.)

12 May 58

The agreement between the US and Canadian governments establishing NORAD was formalized. The agreement included 11 principles governing the organization and operation of NORAD and called for a renewal of the agreement in 10 years.

Jun 58

First ARADCOM unit became operational with Nike Hercules, Battery A, 2d Missile Battalion, 57th Artillery, near Chicago.

Jul 58

Pacific Sea Barrier, consisting of US Navy picket ships, became fully operational.

31 Jul 58

CINCNORAD recommended to the JCS that a hardened combat operations center with adjacent headquarters complex for NORAD be constructed without delay in the Colorado Springs area.

2 Aug 58

The first two stations (one for transmission and one for receiving) of an electronic fence across the southern US, the US Navy's space surveillance system (NAVSPASUR), became operational.

Jan 59

US Ground Observer Corps inactivated.

26 Jan 59

First Semi-Automatic Ground Environment (SAGE) Division became operational.

18 Mar 59

The JCS approved locating a new NORAD Combat Operations Center in Cheyenne Mountain, south of Colorado Springs, CO.

1 Apr 59

The Aleutian extension of the DEW Line (DEW West) became operational.

Apr 59

Texas Tower No. 4 became operational, completing the off-shore radar platform program as part of NORAD's air defense networks.

31 May 59

CINCNORAD told JCS that he firmly believed NORAD should be designated the military command to operate the National Space Surveillance Control Center and he was proceeding with planning for its future integration into the new, hardened Combat Operations Center in Cheyenne Mountain.

25 Mar 60

US Navy picket ships were withdrawn from the Atlantic DEW Line sea barrier.

22 Jul 60

The Commander, USAF Air Defense Command, supported the development of a space-based Missile Defense Alarm System (MIDAS) and stated it was imperative to expand and accelerate the program to meet the Intercontinental Ballistic Missile (ICBM) threat.

Sep 60

Exercise Sky Shield is the first continent-wide exercise under NORAD direction and the first grounding of all non-exercise air traffic in US and Canada.

Sep 60

BMEWS Site No. 1, Thule Air Base, Greenland, detection radars reached initial operational capability – first operation of BMEWS.

7 Nov 60

Space Detection and Tracking System (SPADATS) transferred to NORAD operational control and operational command to CONAD.

1 Feb 61

NAVSPASUR assigned to SPADATS under operational control of CINCNORAD.

14 Feb 61

1st Aerospace Surveillance and Control Squadron activated at Ent AFB, CO to operate the SPADATS Center. The squadron was also responsible for operation of the BMEWS Central Computer and Display

Facility in the NORAD Operations Center.

16 Jun 61

Excavation began for the NORAD Combat Operations Center in Cheyenne Mountain.

3 Jul 61

Space Detection and Tacking System (SPADATS) Center officially dedicated at Ent Air Force Base, CO.

1 Aug 61

Four sites of the Greenland extension (DEW East) of the DEW Line became operational. This completed the entire DEW Line from Greenland to the Aleutians.

Sep 61

BMEWS Site No. 2, Clear Air Station, AK, achieved full operational capability.

14 Oct 61

"The Day the Planes Stood Still." Exercise Sky Shield II grounded all civilian aircraft for 12 hours by special FAA order. It was the largest airborne military exercise ever: 1,800 NORAD fighters flew 6,000 sorties. An estimated 2,900 commercial flights were delayed.

Feb 62

Alaskan NORAD Region Headquarters organized.

8 Feb 62

General L. S. Kuter, CINCNORAD, briefed President Kennedy and Vice President Johnson on the adequacy of continental defense. He advocated extending the missile warning system to cover approaches by missiles from any direction.

19 Jul 62

A Nike Zeus antiballistic missile (ABM) made first successful interception of an ICBM target nose cone, flown at true ICBM range, speed, and trajectory of Kwajalein. The target was boosted into trajectory by an Atlas missile launched from Vandenberg AFB, CA.

6 Aug 62

Secretary of Defense Robert McNamara directed the USAF to drop all plans for deploying MIDAS, an early forerunner system for infrared missile warning, and to reorganize the program as an R&D effort.

Oct 62

CONAD increases its weapons readiness status because of Cuban Missile Crisis. CONAD also increased its radar and weapons forces in the Florida area and dispersed part of interceptor force in US.

17 Aug 63

Canada agreed to permit the use of nuclear warheads on BOMARC IM-99Bs based in Canada.

Jan 64

BMEWS Site No. 3, Fylingdales Moor, England, became operational.

23 Jul 64

BOMARC IM-99A phased out of USAF Air Defense Command's inventory as a tactical weapon.

1 Sep 65

Naval Forces Continental Air Defense Command disestablished, although Navy representation at CONAD/NORAD headquarters, the regions, and sectors continued.

20 Apr 66

CINCNORAD transferred the NORAD Combat Operations Center operations from Ent Air Force Base to the Cheyenne Mountain Complex.

2 May 66

NORAD informed HQ USAF that during the fiscal years 1970-1972 it would need to completely redesign the NORAD Combat Operations Center system (425L). It reasoned that by Fiscal Year (FY) 1971 computers and peripheral equipment in the center would be eight years old and obsolete.

6 Feb 67

Space Defense Center became operational in Cheyenne Mountain Complex. The NORAD Combined Operations Center achieved full operational capability in Cheyenne Mountain. The total cost for the project to that date was \$142.4M.

30 Mar 68

Canada and the US renewed the NORAD Agreement through an exchange of diplomatic notes. The renewal became effective 12 May 68. Three important changes were made in the original agreement signed in May 58:

- (1) The renewal period would run for 5 years instead of 10 years.
- (2) The 1968 agreement provided for termination of the agreement upon request of either government following a period of notice of one year.
- (3) The first agreement had made no mention of defense against ballistic missiles, but the 1968 agreement specifically affirmed that Canada would not be committed to participate in an active ballistic missile defense.

Jun 69

The US Senate Armed Services Committee approved authorization of \$759,100,000 for the Safeguard System.

20 Jun 69

HQ USAF issued System Management Directive 9-312-427M(1), "Cheyenne Mountain Complex Improvement Program (427M)."

25 Jul 69

The US Army redesignated the Sentinel System, the US ABM missile defense system, as the Safeguard System.

May 70

The AN/FPS-85 phased-array detection and tracking radar at Eglin Air

Force Base, FL, was declared fully operational. This did not include the SLBM detection and warning function.

Mar 71

Twenty-seven Nike Hercules batteries in the US released from air defense alert and inactivated on 30 Jun 71.

Oct 71

The first successful synchronous orbit of a Defense Support Program (DSP) satellite, capable of providing space-based missile early warning.

26 May 72

A "Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems" was concluded. Treaty ratified by US Senate on 3 Aug 72. It limited antiballistic missile deployment in each country to two sites, one for defense of the national capital, and one for defense against ICBMs.

10 May 73

By an exchange of notes, Canada and the US extended the NORAD Agreement without alteration for a period of two years to 12 May 1975.

4 Mar 74

Secretary of Defense Schlesinger, in the Annual Defense Department Report, FY 75, said assured capability to retaliate decisively against Soviet cities even after absorbing the full weight of a Soviet nuclear attack offered the best hope of deterring attack, thus protecting our cities. Therefore, spending \$1B a year on air defenses was no longer consistent with overall US strategic policy. This concept is popularly known as "Mutually Assured Destruction" (MAD).

31 Mar 74

The Safeguard ABM site at Grand Forks, ND achieved initial operational capability. This was the nation's first and only ABM site. Operational command was assigned to CINC Continental Air Defense Command in Apr 75 and achieved full operational capability in Oct 75. The site closed in Feb 76.

Jan 75

US Army Air Defense Command, component command of NORAD/CONAD, inactivated at Ent AFB, CO.

Apr 75

CINCCONAD assumed operational control of Safeguard.

8 May 75

In an exchange of notes, Canada and the US extended the NORAD Agreement for five years. Principal features of the renewal agreement were:

- Recognition that ballistic missiles constituted the primary threat to North America
- The ballistic missile caveat remained in the agreement (Canada would not commit to participation in missile defense program)

- Need to monitor space activities of both strategic and tactical interest for defense of North America
- Need to maintain effective surveillance of airspace to ensure air sovereignty of both nations

12 May 75

NORAD Agreement renewal acknowledged role of NORAD in space surveillance and aerospace warning of attack.

30 Jun 75

CONAD, created 1 Sep 54, was disestablished.

1 Jul 75

The JCS reorganized the Aerospace Defense Command into a specified command. Designated ADCOM, it retained its identity as a USAF component, while assuming those functions formerly exercised by CONAD.

18 Jul 75

The FPS-85 radar at Eglin AFB FL, formerly a space surveillance radar, was modified to perform the sea-launched ballistic missile detection and tracking function. It achieved initial operational capability on this date.

Aug 75

First of new series of quarterly NORAD exercises, Vigilant Overview 76-1, was conducted.

Sep 75

USAF approved the tethered balloon radar (Seek Skyhook) system at Cudjoe Key Air Station, FL.

Sep 75

Canada's military air services organized into a single command – Canadian Forces Air Command.

10 Feb 76

Aerospace Defense Command, acting on JCS orders, informed all concerned that Safeguard ABM System operations were terminated and that the system was released from operational control to Commander in Chief, Aerospace Defense Command.

Apr 76

PAVE PAWS, a phased-array early warning radar proposed to replace Sea-Launched Ballistic Missile warning system radars (AN/FSS-7s), contract awarded for site at Otis AFB, MA, and at Beale AFB, CA.

Aug 76

Safeguard ABM system inactivated and Safeguard assets transferred to US Army Ballistic Missile Defense Systems Command.

31 Aug 76

A Canadian Space Detection and Tracking System Site at St. Margarets,

New Brunswick, reached initial operational capability. It had one Baker-Nunn satellite tracking camera and one satellite identification and tracking telescope.

Oct 76

System testing of new Cobra Dane phased-array radar began at Shemya AFB, AK. Cobra Dane supported Spacetrack and other missions.

Dec 76

Two E-3A Airborne Warning and Control Systems (AWACS) aircraft participated in a NORAD-wide exercise, Vigilant Overview 77-1, flying in the 25th NORAD Region area of responsibility. This demonstrated for the first time the ability of the E-3A force to execute the air defense mission in a North American environment.

Dec 76

The Perimeter Acquisition Radar (PAR), Langdon, ND reached initial operational capability. PAR is part of the PAR Attack Characterization System (PARCS) which is the only operating system remaining from the Safeguard ABM System. PARCS was integrated into the NORAD Combat Operations System on 4 Jan 77.

29 Jan 79

The first E-3A AWACS aircraft was designated to support NORAD mission requirements. This marked the beginning of the changeover from the (SAGE) system to the Joint Surveillance System (JSS) radar configuration in the 25th NORAD Region.

29 Mar 79

The USAF made a public announcement of its plans to reorganize its aerospace defense forces. Consequently, the USAF inactivated ADCOM as a major command and reassigned its resources to other commands.

Apr 79

Last US Army Nike Hercules and Hawk batteries dedicated to continental air defense were deactivated.

1 Oct 79

The first of a two-part reorganization of aerospace defense and surveillance and warning resources took place with the transfer of USAF ADCOM atmospheric defense resources (interceptors and warning radars) to the Tactical Air Command (TAC), and communications and electronics assets to the Air Force Communications Command (AFCC). Thereafter, these two commands had resource management responsibility.

9 Nov 79

For about three minutes, a test scenario of a missile attack on North America was inadvertently transmitted to the operational side of the 427M system in the Cheyenne Mountain Complex Operations Center. It was processed as real information, displayed on missile warning consoles in the command post, and transmitted to national command centers. About eight minutes elapsed between the time test data appeared and NORAD assessed confidence that no strategic attack was underway. This aroused widespread public

and congressional interest. Corrective actions to prevent a reoccurrence continued into 1980. This incident was fictionalized and exaggerated in the 1983 movie *WarGames*.

1 Dec 79

The second part of the USAF ADCOM reorganization took place with the transfer of missile warning and space surveillance assets to Strategic Air Command (SAC).

Apr 80

Six of seven FSS-7 Sea-Launched Ballistic Missile detection sensor sites phased out. Site at MacDill AFB, FL, retained.

3 & 6 Jun 80

Failure of a computer chip within the NORAD Control System caused false missile warning data to be transmitted to SAC, the National Command Center, and the National Alternate Command Center. This incident built upon the public and congressional concern dating to 9 Nov 79.

Jan 81

USAF published the Air Defense Master Plan recommending new initiatives in Air Defense.

Mar 81

President Ronald Reagan and Prime Minister Pierre Trudeau finalized the US-Canada Joint Policy Statement on Air Defense.

12 May 81

Canada and the US extended the NORAD Agreement for another five years. The renewal was preceded by extensive Canadian public discussion and reports on the status of the agreement. Opinion weighed heavily on the side of continued participation and that Canada should consider participation in space-based programs and systems. Changes in the agreement reflected this interest:

- The ballistic missile defense caveat was dropped.
- The term change from "air defense" to "aerospace defense" was agreed upon.
- Continued effort was to be made to realign regional boundaries.
- Wording changes to indicate importance of space to North American defense and need for enhanced cooperation in space surveillance activities were made.

31 May 81

The Canadian satellite tracking unit ceased operations at Cold Lake, Alberta. The site had been equipped with a Baker-Nunn Camera.

Oct 81

HQ Cheyenne Mountain Support Group, a unit assigned to the Aerospace Defense Center, was activated at the Cheyenne Mountain Complex.

1 Sep 82

USAF Space Command activated and given resource management of missile warning and space surveillance assets which was under operational control of ADCOM.

1 Jun 83

The 22nd NORAD Region was redesignated as the Canadian NORAD Region with headquarters at North Bay, Ontario, Canada.

18 Mar 85

Secretary of Defense Caspar W. Weinberger, and the Canadian Minister of Defence, Erik Nielsen, signed the North American Air Defense Modernization Memorandum, which authorized the building of North Warning System (NWS).

2 Aug 85

The Chairman of the Joint Chiefs of Staff (CJCS) approved the organizational structure for US Space Command (USSPACECOM), a JCS unified command, inactivation of ADCOM, and USSPACECOM's relationship with NORAD, and proposed establishment of US Element NORAD (USELMNORAD).

28 Aug 85

President Reagan advised Canadian Prime Minister Mulroney of US plans for activating the USSPACECOM.

7 Sep 85

Canadian Government announced its decision to decline the US invitation to participate in the research stage of the Strategic Defense Initiative (SDI).

16 Sep 85

US Secretary of Defense directed the Unified Command Plan (UCP) be amended to reflect establishment of USSPACECOM and USELMNORAD.

23 Sep 85

USSPACECOM was activated at Colorado Springs, CO. Component commands were Air Force Space Command, Naval Space Command, and the Army Space Liaison Office. One of USSPACECOM's mission taskings was to support NORAD by providing missile warning and space surveillance data as necessary to fulfill the US's commitment to the NORAD Agreement.

19 Mar 86

Canadian Prime Minister Mulroney and President Reagan signed the NORAD renewal agreement. It became effective on 12 May 1986.

1 Oct 86

Continental United States (CONUS) NORAD Region activated.

19 Dec 86

Aerospace Defense Command, the specified command, was inactivated at Colorado Springs, CO.

27 Jan 87

The Canadian Chief of Defence Staff validated the Wide Area Surveillance System NORAD Statement of Requirement (NSOR.)

2 Mar 87

USSPACECOM's Space Operations Center (SPOC), located at Peterson AFB, achieved initial operational capability.

Apr 87

The US and Canada began deployment of the first segment of the NWS. The NWS series of radar sites replaced the DEW Line.

24 Jun 87

The solid-state phased-array radar at Thule Air Base, Greenland, achieved initial operational capability.

16 - 27 May 88 The US First Air Force and Air Command (Canadian Forces) conducted site surveys of the five Forward Operating Locations in Canada.

30 Jun 88

NORAD implemented a new Air Defense Identification Zone (ADIZ) in order to make the ADIZ contiguous around the periphery of North America. The ADIZ was defined as that area of airspace over land or water in which the ready identification, location, and control of aircraft was required in the interest of national security.

22 Jul 88

The detection and tracking BMEWS Site No. 1 (Thule) was dismantled after having been replaced by phased-array radar in 1987.

28 Sep 88

National Defense Authorization Act for FY 1989 Directed Department of Defense involvement in drug interdiction enforcement.

2 Nov 88

Deputy Secretary of Defense, William H. Taft, IV, granted CINCNORAD full and permanent membership in the Department of Defense Planning, Programming, and Budgeting System to better ensure NORAD resource requirements were addressed.

24 Jan 89

Government of Canada formally agreed with NORAD's involvement in anti-drug mission as being the NORAD Agreement air sovereignty mission.

15 Oct 89

CINCNORAD published counternarcotics campaign plan, SNOWFENCE 90, detailing overall doctrine, strategy and force employment plans in support of national anti-drug efforts.

Nov 89

The fall of the Berlin Wall heralded the beginning of the end of the Cold War.

Jan 91

As a result of the continued US and Allied presence in the Middle East resulting from Operations DESERT SHIELD and DESERT STORM, NORAD's Missile Correlation Center added Theater Missile Warning to its mission set.

23 Jan 91

Fighter Group Canadian Regional HQ proposed an upgrade of the Regional Operational Command Centers (ROCC).

May 91

The USSPACECOM J4-J6 staff prepared a draft NORAD/USSPACECOM regulation that outlined the NORAD/USSPACECOM Integrated Command and Control System Mission Systems Integration process.

2 May 91

Phase I, Precision Acquisition Vehicle Entry Phased Array Warning System (PAVE PAWS) radar upgrade program, at Beale AFB in California, achieved initial operational capability.

23 Sep 91

CINCNORAD dedicated NORAD/USSPACECOM Combined Intelligence Center (CIC), marking the culmination of efforts to consolidate the intelligence resources of the two commands.

7-17 Jan 92

Operation Sunburst, a joint US Customs Service/Department of Defense counternarcotics operation was conducted.

11 Feb 92

The Secretary of the Air Force concurred with CINCNORAD's request to continue operation of the east coast OTH-B radar on a limited basis through FY93 and maintain the west coast OTH-B site in warm storage.

Jul 92

HQ NORAD completed its Strategy Review Report outlining potential changes for the command in the future.

5 Oct 92

General Charles A. Horner, CINCNORAD, outlined his concept for NORAD participation in the ballistic missile defense program.

Feb 93

CINCNORAD General Horner issued a paper titled "Shaping NORAD in the Post-Soviet Threat," which evaluated emerging threats and how the command would defend against those dangers.

Feb 93

CINCNORAD announced the implementation of a "flexible alert" concept. The strategy gave regional commanders the authority to raise and lower readiness in their alert fighter force according to the perceived threat. This marked a radical change from 24-hour alert status performed by NORAD alert fighters during the Cold War.

Mar 93

Relocatable Over-the-Horizon (ROTHR) radar entered counter-drug operations.

Jul 93

CINCNORAD approved First Air Force and Air Combat Command's recommendation to consolidate Northwest and Southwest Sector Operations Command Centers (SOCCs) into West SOCC at McChord Air

Force Base, Washington.

15 Jul 93

The DEW Line officially closed.

Nov 93

The Deputy Secretary of Defense issued Interim National Drug Control Policy. The Memorandum announced a major shift in focus for US counterdrug efforts from "transit zones" to "source countries." The policy meant a reduction in NORAD's counter-drug mission efforts.

Nov 93

Canadian and US representatives met in Washington, DC, to begin consideration of the 1996 NORAD Agreement Renewal process. Revamping the agreement to reflect the decline of the Soviet Union and the inclusion of Ballistic Missile Defense in the NORAD Agreement were major issues.

Mar 94

US Secretary of Defense authorized warm storage of OTH-B radar at Bangor, Maine.

1 Jan 95

NORAD combined the Northwest and Southwest Air Defense Sectors into the Western Air Defense Sector.

16 Mar 96

CINCNORAD directed a change in names of the Region and Sector Operations Control Centers (ROCC/SOCC) to Region and Sector Air Operations Centers (RAOC/SAOC) to put them in line with Joint and USAF doctrine.

28 Mar 96

Canada and the US signed a renewal of the NORAD Agreement that became effective on 12 May 96. The 1996 Agreement redefined the command's missions as (1) aerospace warning for North America, and (2) aerospace control for North America. A consultative mechanism was included on issues concerning aerospace defense and there was a provision that both parties agreed to sound environmental practices related to NORAD operations in accordance with joint consultations.

Apr 96

Canada announced the planned transition of Canadian NORAD Region (CANR) headquarters functions to a consolidated 1st Canadian Air Division and Canadian NORAD Region Headquarters (1CAD/CANR HQ)

19 Apr 96

Observation date of the thirtieth anniversary of the Cheyenne Mountain Complex operation.

Jan 97

CINCNORAD approved the NORAD Vision 2010 Briefing, which was developed to reflect the command's vision for 2010 and beyond to include future security challenges, missions, capabilities, and an implementation process.

1 Apr 97

Transfer of responsibilities from Region Air Operations Center, North Bay, to new CANR NORAD Region HQ in Winnipeg completed.

12 Sep 97

Fortieth anniversary of the establishment of Headquarters, North American Air Defense Command (NORAD) at Ent AFB, Colorado Springs, CO.

12 May 98

Fortieth anniversary of the exchange of notes between Canada and the US for the establishment of NORAD.

25 Oct 99

NORAD fighters provided emergency response to Payne Stewart's Learjet 35, which ultimately crashed with no survivors in South Dakota.

16 Jun 00

NORAD agreement extension signed by US Secretary of State Madeline Albright and Canadian Minister of Foreign Affairs Lloyd Axworthy.

Jul 00

Tethered Aerostat Radar System transferred to US Customs, effective 1 Oct 00.

6 Jul 00

Groundbreaking ceremony held for new NORAD and USSPACECOM headquarters at Peterson AFB.

Nov-Dec 00

Russian Bear Bomber flights resumed in Alaska NORAD Region area. OPERATION NORTHERN DENIAL positioned US and Canadian aircraft in forward operating bases through 15 Dec.

Apr 01

Canada-US Military Cooperation Committee confirmed validation of the Cruise Missile Defense of North America Mission Needs Statement (version 5.5).

Mar-Apr 01

NORAD Combat Operations and Air Combat Command operations staff members agreed to the three Air Operating Centers (CONR, CANR, ANR).

1 Jun 01

Joint Staff issued CJCSI2610.01A, which provided interception and destruction guidance for aircraft piracy (hijacking) incidents or requests for destruction of derelict airborne objects.

20 Jun 01

FPS-117 secondary RADAR beacons to be replaced between 2002-2005.

23 Aug 01

NORAD System Support Facility and FAA announced cooperation on Flight Plan Data Software, a data-sharing project.

11 Sep 01

Terrorists hijacked four US airliners, crashing two into the World Trade Center towers, one into the Pentagon, and one into a field in rural Pennsylvania. US Joint Forces Command chopped Air Force and Navy aircraft to NORAD to protect against further terrorist attacks. Aegis guided missile cruisers and destroyers were deployed to assist the Air Force and Air National Guard in defending critical CONUS airspace.

13 Sep 01

CJCS designated military operations in support of homeland security as OPERATION NOBLE EAGLE (ONE).

9 Oct 01

OPERATION EAGLE ASSIST involved deployment of five NATO E-3 AWACS aircraft to Tinker AFB in Oklahoma to support ONE.

27 Nov 01

NORAD Contingency Suite (NCS) was fielded, providing critical command and control equipment and battle management software to support contingency operations within the Continental US NORAD Region (CONR).

29 Jan 02

Canadian Vice Chief of Defence LGen George Macdonald announced that extended collaboration between US and Canadian forces on land and sea could be modeled on NORAD.

3 Sep 02

CANUS Joint Planning Group proposed by Canadian Senate Committee on National Security and Defence.

8 Nov 02

Headquarters NORAD presented with Joint Meritorious Unit Award for defense of North America (11 Sep 01 to 10 Sep 02).

3-5 Dec 02

Canadian Minister of Foreign Affairs William Graham and US Secretary of State Colin Powell exchanged diplomatic notes establishing the Bi-National Planning Group (BPG).

1 Feb 03

NORAD-USNORTHCOM provided search support and military support to civil authorities after Space Shuttle *Columbia* disaster.

Picture caption: *Since 9/11, NORAD has increased its activities protecting high-visibility events such as NASA launches and sporting events. In 2002, NORAD supported the Winter Olympics in Salt Lake City. In 2006, Super Bowl XL in Detroit was protected by US and Canadian fighters under Operation NOBLE EAGLE. In 2008, the NORADUSNORTHCOM Color Guard was invited to participate in the opening ceremonies of Super Bowl XLII in Glendale, Arizona.*

26 Jan 04

Cheyenne Mountain Operations Center upgrade reported in open-source news media. Upgrade included involvement in ground-based missile defense missions.

30 Jan 04

NORAD began protective measures in support of Super Bowl XXXVIII in Houston, Texas. This mission continues in subsequent years.

17 Jun 04

CDR NORAD-USNORTHCOM General Ralph Eberhart testified before the 9/11 Commission on military response to 9/11 and NORAD support provided.

5 Aug 04

US and Canadian officials approved amendment to 1996 NORAD agreement, authorizing NORAD to make missile warning information available to US commands involved in ballistic missile defense.

30 Nov 04

President Bush and Prime Minister Martin issued joint communiqué reinforcing security cooperation in the areas of intelligence sharing, border security, and combating human trafficking. NORAD Agreement was expanded to address increased security cooperation.

4 Mar 05

Ribbon-cutting ceremony officially opened the renovated command center at Cheyenne Mountain Air Force Station.

21 Jun 05

Visual Warning System (VWS) was deployed in the US National Capital Region. The VWS warns pilots who encroach on the restricted flight area.

13-21 Jul 05

NORAD protected Space Shuttle *Discovery* launch at Cape Canaveral. Mission continued for *Atlantis* (Aug-Sep 06) and *Discovery* (Dec 06).

11-15 Dec 05

CDR NORAD-USNORTHCOM ADM Timothy Keating meets with Lt. Gen. Igor Khvorov, Russian long-range bomber force commander, to discuss safety of flight for aviators of both countries.

1 Feb 06

Canada Command (Canada COM) stood up to conduct routine and contingency domestic operations. A close relationship with USNORTHCOM is planned.

11-13 Apr 06

NORAD fighters intercepted and escort Russian Long-range Aircraft off the Canadian and Alaskan coasts.

12 May 06

NORAD Agreement renewed to include Maritime Warning in addition to Aerospace Warning and Aerospace Control.

28 Jul 06

CDR NORAD and USNORTHCOM ADM Timothy Keating announced plan to relocate and combine the NORAD Command Center with the USNORTHCOM Command Center at Peterson AFB. Cheyenne Mountain Operations Center is redesignated as the Cheyenne Mountain Directorate, serving as a training location and alternate command center site.

30 Sep 06

US and Canadian NORAD fighters intercepted two Russian Tu-95 "Bear" Bombers near Alaskan airspace.

11 Oct 06

NORAD aircraft responded to a Manhattan airplane crash that killed NY Yankees pitcher Cory Lidle and his flight instructor.

20 Nov 06

Northeast Air Defense Sector (NEADS) and Southeast Air Defense Sector (SEADS) combined into Eastern Air Defense Sector (EADS). Western Air Defense Sector (WADS) opened its new operations center.

May 07

General Accountability Office released report on proposal to move certain NORAD and other operational centers out of Cheyenne Mountain.

28 Jun 07

Canadian National Defence Headquarters announced a \$4 billion spending plan with Lockheed Martin for 80 F-35 Lightning II Joint Strike Fighters over the course of 10 years.

16 Nov 07

The NORAD Tracks Santa mission continued to grow. By 25 Dec 07, the Website received more than 10 million visitors and 905 million hits from 212 countries. Over 1,000 volunteer operators staffed 100 telephones and 24 computer terminals at Peterson AFB. Operators fielded approximately 450,000 telephone calls during the entire period. Activity spiked on Christmas Eve with approximately 95,000 telephone calls and 1,000 e-mails.

22 Nov 07

On their first mission in Alaska, F-22 Raptor aircraft intercepted two Russian Bear-H Bombers.

9-10 Jan 08

Canadian Minister of National Defence Peter McKay visited General Renuart, CDR NORAD and USNORTHCOM, and other command leaders to discuss future NORAD, USNORTHCOM, and Canada COM cooperation.

12 May 08

NORAD celebrates its 50th anniversary with a commemorative ceremony and burial of a time capsule. Other celebratory events include a gala ball at the Broadmoor and many distinguished visitors.

2008

Transformation of primary command center of operations from Cheyenne

Mountain to the NORAD and USNORTHCOM Command Center will be completed. Cheyenne Mountain will become the NORAD and USNORTHCOM Alternate Command Center (ACC) and crew training site.

6 Apr 09

F-16s Respond to Airspace Violation. Two F-16 fighters under NORAD's direction intercepted a small Cessna aircraft near Michigan's Upper Peninsula and the Wisconsin border. The civilian aircraft, which was reported stolen, departed Thunder Bay, Ontario, and entered U.S. airspace flying south over Lake Superior. The pilot acknowledged the fighters, but was unresponsive to non-verbal commands. The F-16s followed the aircraft until it landed near Poplar Bluff, MO.

18-20 Jun 09

Exercise AMALGAM DART involved detecting, identifying, tracking and intercepting potentially threatening airborne missiles or aircraft at Camp Rilea, OR. For the exercise the Army National Guard ground-based air defense system was integrated with U.S. Air Force AWACS and fighters, in addition to a U.S. Navy Aegis Destroyer, all under the direction of the CONR Commander at the Air and Space Operations Center at Tyndall AFB, FL.

10 Jul 09

Deputy Commander Change of Office. NORAD held a Change of Office ceremony for the Deputy Commander at Peterson AFB. Canadian Lt. Gen. Marcel Duval assumed the NORAD Deputy Commander position from Canadian Lt. Gen. Charlie Bouchard. Gen. Gene Renuart, Commander, NORAD and USNORTHCOM presided over the ceremony. Chief of the Defence Staff for the Canadian Forces, Gen. Walter Natynczyk, and the Chief of the Air Staff for the Canadian Air Force, Lt. Gen. Angus Watt also attended.

2-6 Nov 09

Exercise VIGILANT SHIELD 10. NORAD fighter jets conducted training over Vancouver Island and the Canada mainland in support of security preparations for the 2010 Olympic and Paralympic Winter Games. The training focused on NORAD's intercept and identification operations.

13 Nov 09

Joint Meritorious Unit Award. The Chairman of the Joint Chiefs of Staff awarded NORAD and USNORTHCOM military and civilian personnel the Joint Meritorious Unit Award (JMUA) for service from 1 January 2007 to 31 December 2008. NORAD's meritorious service recognized included visually identifying hundreds of unknown aircraft in Canadian and U.S. airspace and protecting restricted airspace.

7 Feb 10

The 44th Super Bowl was held at the Sun Life Stadium in Miami, Florida. Continental U.S. NORAD Region fighters enforced the FAA's temporary flight restriction zone during the game.

12-28 Feb 10

NORAD supported the 2010 Winter Olympic Games in British Columbia, Canada, by providing aerospace warning and control. During the Games CANR regularly intercepted Tracks of Interest in the Olympic area. CONR provided airborne early warning and air-refueling assets to support CANR and ANR stood-by assist as directed.

14-17 Mar 10

Ambassador Gary Doer, Canadian Ambassador to the United States and Ambassador David Jacobson United States Ambassador to Canada visited NORAD and USNORTHCOM to discuss command-related issues regarding Canada and the United States. The Command's key interest was to provide information and insights into how NORAD and USNORTHCOM could better coordinate and synchronize efforts with

the U.S. Embassy Ottawa and the Canadian Embassy Washington to build the two countries' relationship and provide more effective defense and security on the North American continent.

15 May 10

CANR CF-18s escorted a Cathy Pacific Airways flight to Vancouver International Airport after a bomb threat was reported.

3-9 Nov 10

Exercise VIGILANT SHIELD 11 NORAD exercised its standing plan for the air defense of North America, focusing on its mission of aerospace warning, aerospace control, and maritime warning.